

UML - based conceptual design approach for modeling complex processes in web application

ABSTRACT

Different complex features in web applications have raised new issues on the modelling approach. Web designers should define complex processes in web applications and provide a clear view of the application domain. In this paper, we propose a design model called UEWDM, which applies UML Profiles as the graphical notation in the modeling stage. UEWDM cope with conceptual design by divided it into two sub design called informational class and dynamic process design. Our contributions rely on new UML specific modelling elements to support those complex process modeling. To validate our design modeling, a case study of Academic Management System is provided.

Keyword: Complex process; Conceptual design model; Web applications; Model-driven; UML Profiles